Wind Cave National Park, Accuracy Assessment Metadata

Identification_Information:
Citation:
Citation_Information:
Originator: U.S. Geological Survey
Originator: Department of the Interior
Publication_Date: 19990430
Title: Wind Cave National Park Accuracy Assessment
Geospatial_Data_Presentation_Form: database and report
Series_Information:
Series_Name: USGS-NPS Vegetation Mapping Program
Issue_Identification: Wind Cave National Park
Publication_Information:
Publication_Place: Denver, CO
Publisher:
USGS Biological Resources Division, Center for Biological Informatics
Online_Linkage: http://biology.usgs.gov/npsveg/wica/index.html#accuracy_assessment_info
Description:
Abstract:
The accuracy assessment field work was performed to verify the accuracy of the vegetation communities spatial data developed by the USGS-NPS Vegetation Mapping Program for Wind Cave National Park. The data points were stratified according to vegetation association over the project area according to protocols developed by the Program. Points were located by GPS navigation and the community information was collected at the point, without knowledge of the attributes of the vegetation spatial data. Accuracy assessment attribute were composed with the map codes and a contigency table was developed.
Purpose:
To verify the accuracy of the mapped vegetation communities at Wind Cave National Park
Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 199809
Ending_Date: 199812
Currentness_Reference: Source of data collection
Status:
Progress: Complete
Maintenance_and_Update_Frequency: None Planned
Spatial_Domain:
Bounding_Coordinates:
West_Bounding_Coordinate: -103.6194
East_Bounding_Coordinate: -103.3222
North_Bounding_Coordinate: 43.65139
South_Bounding_Coordinate: 43.50639
Description_of_Geographic_Extent:
Wind Cave National Park, SD including approx 5 mile buffer around park which includes private lands and portions of Custer State Park and Black Hills National Forest.
Keywords:
Theme:
Theme_Keyword_Thesaurus: None
Theme_Keyword: association
Theme_Keyword: alliance
Theme_Keyword: land cover

Theme_Keyword: land use
Theme_Keyword: vegetation
Theme_Keyword: National Park Service
Place:
Place_Keyword_Thesaurus: None
Place_Keyword: Wind Cave National Park
Place_Keyword: Pringle
Place_Keyword: South Dakota
Place_Keyword: National Park
Place_Keyword: Wind Cave National Park
Taxonomy:
Keywords/Taxon:
Taxonomic_Keyword_Thesaurus: None
Taxonomic_Keywords: Plants
Taxonomic_Keywords: vegetation
Taxonomic_Keywords: National Vegetation Classification System
Taxonomic_System:
Classification_System/Authority:
Classification_System_Citation:
Citation_Information:
Originator: U.S. Government; Federal Geographic Data Committee
Publication_Date: 19971022
Title: National Vegetation Classification Standard (NVCS)
Geospatial_Data_Presentation_Form: document
Publication_Information:
Publication_Place: Washington D.C.
Publisher: Federal Geographic Data Committee
Online_Linkage: http://www.fgdc.gov/standards/status/sub2_1.html
Taxonomic_Procedures:
Sequence of field test data and observation plots, and CIR photo signature field observations.
General_Taxonomic_Coverage:
Refer to complete listing of mapped plant alliances/associations under Supplemental Information above.
Taxonomic_Classification:
Taxon_Rank_Name: Kingdom
Taxon_Rank_Value: Plantae
Access_Constraints: None
Use_Constraints:
Any person using the information presented here should fully understand the
data collection and compilation procedures, as described in the metadata,
before beginning analysis. The burden for determining fitness for use lies
entirely with the user. For purposes of publication or dissemination, citations
or credit should be given to the U.S. Geological Survey, and the National Park
Service, and the U.S. Bureau of Reclamation.
Point_of_Contact:
Contact_Information:
Contact_Person_Primary:
Contact_Person: USGS-NPS Vegetation Mapping Program Coordinator
Contact_Organization: U.S. Geological Survey, Center for Biological Informatics
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Address_Type: mailing and physical address
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Denver Federal Center
City: Denver
State_or_Province: Colorado
Postal_Code: 80225

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Contact_Facsimile_Telephone: 303-202-4219 (org)
Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov
Browse_Graphic:
Browse_Graphic_File_Name: http://biology.usgs.gov/npsveg/wica/images/wicaaa.gif
Browse_Graphic_File_Description:
83 kbyte file showing vegetation associations and location of accuracy assessment points
Browse_Graphic_File_Type: GIF
Native_Data_Set_Environment: text file

Data_Quality_Information:
Attribute_Accuracy:
Attribute_Accuracy_Report:
The attributes for the accuracy assessment were recorded in the field in September-December, 1998. Vegetation associations were identified based on the field key and plant identification. If additional communities were found within a 50 meter radius of the plot center, they were recorded as well. During the analysis, it was concluded that some attributes were in error and changed to match the mapped attributes. This was done by examination of the aerial photographs under stereoscopic view. The attributes were in error due to 1) spatial error in the GPS derived coordinates (4-8 meters), 2) change of vegetation community due to temporal changes, or differences between observation team identifications.
Logical_Consistency_Report:
All attributes are codes that correspond to vegetation communities and have been checked for typographical and logical errors.
Completeness_Report:
All points were collected and analyzed. Several points fell outside the mapping area, so were discarded.
Positional_Accuracy:
Horizontal_Positional_Accuracy:
Horizontal_Positional_Accuracy_Report:
The points were located using a military-style GPS receiver (PLGR), which has a published accuracy of 4-8 meters.
Vertical_Positional_Accuracy:
Vertical_Positional_Accuracy_Report: Not applicable
Lineage:
Methodology:
Methodology_Type: Field
Methodology_Identifier:
Methodology_Keyword_Thesaurus: None
Methodology_Keyword: Accuracy Assessment
Methodology_Description:
Data points were located by use of a PLGR GPS receiver. Vegetation communities were identified on the basis of a dichotomous field key and plant species present.
Methodology:
Methodology_Type: Lab
Methodology_Identifier:
Methodology_Keyword_Thesaurus: None
Methodology_Keyword: Accuracy Assessment
Methodology_Description:
Accuracy assessment points were compiled into an ARCINFO point coverage and intersected with the vegetation community coverage. The resulting INFO file was exported into a text file, imported into a spreadsheet, and the attributes from the accuracy assessment and the spatial data were compared. If the attributes did not compare, an analysis of the mismatch was made and either the AA attribute or the map attribute was changed based on identification of the community on the aerial photo.
Source_Information:

Source_Citation:
Citation_Information:
Originator: USGS-Biological Resouces Division
Originator: U.S. National Park Service
Originator: Department of the Interior
Publication_Date: 199411
Title: Accuracy Assessment Procedures, NBS/NPS Vegetation Mapping Program
Geospatial_Data_Presentation_Form: procedures document
Publication_Information:
Publication_Place: Denver, CO
Publisher: USGS, Biological Resources Division, Center for Biological Informatics
Other_Citation_Details:
Prepared by: Environmental Systems Research Institute; Redlands, CA
and National Center for Geographic Information and Analysis,
University of California, Santa Barbara, CA and The Nature Conservancy,
Arlington, VA under contract from U.S. Department of the Interior
Biological Resources Division and National Park Service.
Type_of_Source_Media: electronic document
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 199411
Ending_Date: Present
Source_Currentness_Reference: publication date
Source_Citation_Abbreviation: Accuracy Assessment Procedures Document
Source_Contribution:
This document established the procedures and protocols for the accuracy assessment
at Wind Cave National Park.
Source_Information:
Source_Citation:
Citation_Information:
Originator: U.S. Geological Survey
Originator: Department of the Interior
Publication_Date: 199809
Title:
Wind Cave National Park Spatial Vegetation Data: Cover type / Association level of the
National Vegetation Classification System
Geospatial_Data_Presentation_Form: report
Series_Information:
Series_Name: USGS-NPS Vegetation Mapping Program
Issue_Identification: Wind Cave National Park
Publication_Information:
Publication_Place: Denver, CO
Publisher: USGS, Biological Resources Division, Center for Biological Informatics
Other_Citation_Details:
Remote Sensing and GIS Group, Technical Service Center, US Bureau of
Reclamation, Mail Code D-8260, POB 25007, Denver CO 80225
Type_of_Source_Media: Disc
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 199706
Source_Currentness_Reference: ground condition
Source_Citation_Abbreviation: Spatial data of vegetation communities for Wind Cave National Park.
Source_Contribution:
The vegetation spatial data were tested for accuracy with the AA data.

Process_Step:
Process_Description:
The accuracy assessment field work was performed in September-December, 1998 to verify the accuracy of the vegetation communities spatial data developed by the USGS-NPS Vegetation Mapping Program for Wind Cave National Park. The data points were randomly distributed stratified according to vegetation association over the project area according to protocols developed by the Program. Points were located by GPS navigation and the community information was collected at the point, without knowledge of the attributes of the vegetation spatial data.
Source_Used_Citation_Abbreviation: Spatial data of vegetation communities for Wind Cave National Park.
Source_Used_Citation_Abbreviation: Accuracy Assessment Procedure Document
Process_Date: 199810

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Label Point
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Point

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Planar:
Grid_Coordinate_System:
Grid_Coordinate_System_Name: Universal Transverse Mercator
Universal_Transverse_Mercator:
UTM_Zone_Number: 13
Transverse_Mercator:
Longitude_of_Central_Meridian: -105
Latitude_of_Projection_Origin: 0
False_Easting: 500000
False_Northing: 0
Scale_Factor_at_Central_Meridian: .9996
Planar_Coordinate_Information:
Planar_Coordinate_Encoding_Method: coordinate pair
Coordinate_Representation:
Abscissa_Resolution: 1
Ordinate_Resolution: 1
Planar_Distance_Units: meters
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodedic Reference System 80
Semi-major_Axis: 6378137
Denominator_of_Flattening_Ratio: 298.257

Entity_and_Attribute_Information:
Overview_Description:
Entity_and_Attribute_Overview:
The National Vegetation Classification Standard is organized hierarchically to support conservation and resource stewardship applications across multiple scales. The upper levels of the hierarchy are based on the physical form or structure of the vegetation (physiognomy) and have been refined from the international standards developed by the United nations Educational, Scientific, and Cultural Organization (UNESCO). The two most detailed levels of the hierarchy are based on the species composition of existing vegetation (floristics) and reflect the phyto-sociological standards that were originally developed by European ecologists. The vegetation classification is continually advanced through the collection and analysis of new field data and will be greatly

strengthened during the course of the USGS-NPS mapping efforts. Data file attributes include species, alliance, and community element.

0=no data
1=Purple Three-awn - Fetid Marigold Herbaceous Vegetation
2=Ponderosa Pine Limestone Cliff Sparse Vegetation
3=Redbeds Sparse Vegetation
4=Black Hills Rock Outcrop Sparse Vegetation
5=Shale Barren Slope Sparse Vegetation
6=White Sedimentary Rock Outcrop
7=Bisonj Wallows
11=Little Bluestem - Grama Grass - Threadleaf Sedge Herbaceous Vegetation (with burned ponderosa pine)
12=Chokecherry Shrubland (with burned ponderosa pine)
13=Western Wheatgrass - Kentucky Bluegrass Grassland Complex (with burned ponderosa pine)
14=Emergent Wetland Herbaceous Complex (with burned ponderosa pine)
15=Little Bluestem - Grama Grass - Threadleaf Sedge Herbaceous Vegetation
16=Western Wheatgrass - Kentucky Bluegrass Grassland Complex
17=Introduced Weedy Graminoid Herbaceous Vegetation
18=Needle-and-thread - Blue Grama - Threadleaf Sedge Herbaceous Vegetation
30=Mountain Mahogany / Sideoats Shrubland I (15-50% cover)
31=Mountain Mahogany / Sideoats Grama Dense Shrubland II (50-100% cover)
32=Lead Plant Shrubland
33=Chokecherry Shrubland
34=Beaked Willow Shrubland
35=Western Snowberry Shrubland
36=Creeping Juniper / Little Bluestem Shrubland
40=Plains Cottonwood / Western Snowberry Forest
41=Boxelder / Chokecherry Forest
42=Bur Oak Stand
43=Green Ash - American Elm / Western Snowberry Forest
44=Birch - Aspen Stands
45=Ponderosa Pine Woodland Complex I (75-100% cover)
46=Ponderosa Pine / Little Bluestem Woodland
47=Ponderosa Pine / Chokecherry Forest
48=Ponderosa Pine Woodland Complex II (15-75% cover)
49=Young Ponderosa Pine Dense Cover Complex

Entity_and_Attribute_Detail_Citation:
Bureau of Reclamation's Remote Sensing and Geographic Information Group (RSGIG) with assistance from The Nature Conservancy (TNC) has mapped the vegetation occurring in and around Wind Cave National Park (near Hot Springs, South Dakota). National Park Service/ National Biological Service Vegetation Mapping Project, National Vegetation Classification System 209 pp.

Distribution_Information:
Distributor:
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Contact_Facsimile_Telephone: 303-202-4229
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Distribution_Liability:
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Standard_Order_Process:
Digital_Form:
Digital_Transfer_Information:
Format_Name: HTML
Digital_Transfer_Option:
Online_Option:
Computer_Contact_Information:
Network_Address:
Network_Resource_Name: http://biology.usgs.gov/npsveg/wica/index.html#accuracy_assessment_info
Fees: None

Metadata_Reference_Information:
Metadata_Date: 20011022
Metadata_Review_Date: 20060908
Metadata_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: USGS-NPS Vegetation Mapping Program Coordinator
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Metadata_Standard_Name: FGDC-STD-001.1-1999 Content Standard for Digital Geospatial Metadata, 1998 Part 1: Biological Data Profile, 1999
Metadata_Standard_Version: FGDC-STD-001-1998
Metadata_Extensions:
Online_Linkage: http://biology.usgs.gov/fgdc.bio/bionwext.txt
Profile_Name: Biological Data Profile FGDC-STD-001.1-1999